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10/602,473	06/23/2003	Hua Hsiang Lin	21169-170	2700

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EXAMINER

ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,473

Applicant(s)

LIN ET AL.

Examiner

Jessica L. Rossi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-19, drawn to a method for manufacturing a translucent laminate, classified in class 156, subclass 291.

II. Claim 20, drawn to a translucent laminate, classified in class 442, subclass 38.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the laminate could be made by a process where only the warp and fill strands of the scrim are coated with adhesive so that a step of removing adhesive from the interstices is eliminated.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Makous on 9/1/05 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action. Claim 20 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claimes 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 18-19, it is unclear what Applicant intends in the preamble of the claims as the “consisting of” language directly contradicts the “at least one woven scrim layer disposed between at least two over vinyl translucent layers” language. The “consisting of” language excludes any elements that are not recited in the claims while the “at least” language implies that other elements may be present other than those recited in the claims (see MPEP 2111.03). Applicant is asked to clarify. It is suggested to replace “consisting of” with --comprising-- in the preambles of claims 1 and 18-19.

Regarding claims 2-5, it recites the limitation "the warp and fill strands" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is suggested to insert --strands-- after “warp and fill” in line 7 of claim 1. It is also suggested to insert --strands-- after “warp and fill” in line 7 of claim 18 and line 9 of claim 19 to maintain consistency throughout the claims.

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-11 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art in the specification of the present application in view of the collective teachings of Eysel et al. (US 6468928, cited in IDS) and White (US 5827787; cited in IDS) and further in view of the collective teachings of Price (US 3664907) and Cheong (US 5352508).

With respect to claim 1, it appears Applicant is teaching it being known in the art to make a translucent laminate comprising at least one woven scrim layer disposed between at least two outer translucent layers wherein the method comprises coating the scrim with an adhesive and heating and pressing the scrim, adhesive and outer layers to form the laminate (p. 2, line 9 – p. 3, line 7). However, the Admitted Prior Art is silent as to a particular translucent layer and a particular adhesive and therefore is silent as to vinyl translucent layers and a plastisol adhesive.

Selection of particular translucent layers would have been within purview of the skilled artisan depending on the desired characteristics of the laminate. However, it would have been obvious to use translucent vinyl layers because it is known in the art to form a translucent laminate comprising a woven scrim disposed between at least two outer vinyl translucent layers, as taught by the collective teachings of Eysel (abstract; column 1, lines 37-41; column 2, lines 36-37 and 48-49) and White (abstract; column 3, lines 20-40; column 4, lines 42-45; column 5, lines 3-30).

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Selection of a particular adhesive would have been within purview of the skilled artisan depending on the type of translucent layers used in the laminate. However, it would have been obvious to the skilled artisan at the time of the invention to use a plastisol adhesive to bond the vinyl translucent layers and scrim because such is known in the art, as taught by White (column 5, lines 3-29).

It appears Applicant is also teaching it being known and therefore acknowledged in the art that using adhesive to bond the scrim and translucent layers has its shortcomings because excess adhesive becomes trapped in the interstices of the scrim thereby degrading the translucency of the laminate (p. 2, lines 8-20). Therefore, the Admitted Prior Art is also silent as to removing adhesive from the interstices of the scrim.

It is known in the scrim art to coat the scrim with an adhesive and then remove adhesive from the interstices of the scrim so as to reopen any interstices that may have been occluded during the coating process before bonding other layers to both sides of scrim, as taught by the collective teachings of Price (column 3, lines 73-75; column 4, lines 36-42 and 71-72; **column 6, line 70- column 7, line 5**) and Cheong (column 1, lines 15-20; column 2, lines 57-61; **column 5, lines 13-20**; column 5, lines 52-53; column 5, line 66 – column 6, line 3; column 6, lines 28-30).

Therefore, one skilled in the art looking for a solution to the problem created by excess adhesive blocking the interstices of the scrim in the translucent laminate of the Admitted Prior Art would have been motivated by the collective teachings of Price and Cheong to remove the adhesive from the interstices of the scrim before bonding the scrim to the outer vinyl layers.

Regarding claims 2-5, selection of a material for the scrim would have been within purview of the skilled artisan. However, the selection of materials being claimed by Applicant

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would have been obvious as such materials are known in the art, as taught by the collective teachings of Eysel (column 2, lines 21-23) and White (column 5, lines 5-6).

Regarding claim 6, selection of a particular plastisol adhesive would have been within purview of the skilled artisan; it being noted that Applicant's claimed adhesive is well known and conventional.

Regarding claims 7-9, selection of particular vinyl layers would have been within purview of the skilled artisan. However, it would have been obvious to use translucent vinyl layers like those being claimed by Applicant because such is known in the art, as taught by the collective teachings of Eysel (column 2, lines 48-49) and White (column 5, lines 13-14 and 25-26 and 49-51).

Regarding claims 10-11, selection of a particular thickness for the vinyl layers would have been within purview of the skilled artisan. However, it would have been obvious to the skilled artisan to use vinyl layers having a thickness that falls within Applicant's claimed ranges because such is known in the art, as taught by Eysel (column 2, lines 64-65).

Regarding claim 16, selection of a particular device for heating the vinyl layers, scrim and adhesive and selection of a heating time and temperature would have been within purview of the skilled artisan depending on the materials used; it being noted that heating in an oven is well known and conventional and separately heating layers before bringing them together for lamination is also well known and conventional where this allows the heating temperature and time to be catered toward the individual layers so the most effective bonding conditions can be achieved for lamination.

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Regarding claim 17, it would have been obvious to the skilled artisan to tint the laminate because such is known in the translucent laminate art, as taught by the collective teachings of Eysel (column 2, lines 27 and 57-60) and White (column 5, lines 11-14 and 24-26), where this imparts certain desirable characteristics to the laminate.

With respect to claim 18, it is noted this claim is a combination restating all the limitations set forth in claims 1, 6 and 16.

10. Claims 12-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art, the collective teachings of Eysel and White, and the collective teachings of Price and Cheong as applied to claim 1 above, and further in view of Gray et al. (US 5707904).

Regarding claims 12-13, selection of a particular denier for the scrim would have been within purview of the skilled artisan. However, it would have been obvious to use a scrim having a denier that falls within Applicant's claimed ranges because such is known in the art, as taught by Gray (column 3, lines 12-19).

Regarding claims 14-15, selection of a particular number of strands per inch for the warp and fill of the scrim would have been within purview of the skilled artisan. However, it would have been obvious to use a number of strands per inch for the warp and fill of the scrim that falls within Applicant's claimed ranges because such is known in the art, as taught by Gray (column 3, lines 22-23).

Regarding claim 19, it is noted this claim is a combination restating all the limitations set forth in claims 1, 6, 12-16 and 18.

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11. Claims 1-2, 6-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of the collective teachings of Price and Cheong and further in view of the Admitted Prior Art.

With respect to claim 1, the teachings of White were detailed in paragraph 9 above with respect to claim 1. To reiterate, White teachings making a translucent laminate comprising at least one woven scrim disposed between two outer vinyl translucent layers by coating the scrim with a plastisol adhesive and bonding the scrim and vinyl layers using conventional lamination techniques (column 5, lines 3-30). However, White is silent as to removing adhesive from the interstices of the scrim and heating and pressing the scrim, adhesive and vinyl layers to laminate the same.

It is known in the scrim art to coat the scrim with an adhesive and then remove adhesive from the interstices of the scrim so as to reopen any interstices that may have been occluded during the coating process before bonding other layers to both sides of scrim, as taught by the collective teachings of Price (column 3, lines 73-75; column 4, lines 36-42 and 71-72; **column 6, line 70- column 7, line 5**) and Cheong (column 1, lines 15-20; column 2, lines 57-61; **column 5, lines 13-20**; column 5, lines 52-53; column 5, line 66 – column 6, line 3; column 6, lines 28-30).

Since the Admitted Prior Art acknowledges the shortcomings associated with adhesive blocking the interstices of a scrim disposed between vinyl layers in a translucent laminate, it would have been obvious to the skilled artisan to remove adhesive from the interstices of the scrim of White before bonding the scrim to the vinyl layers to form the translucent laminate because such is known in the scrim art, as taught by the collective teachings of Price and Cheong.

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Since White teachings bonding the scrim and vinyl layers using “conventional lamination techniques” (column 5, lines 20-22), it would have been obvious to the skilled artisan to heat and press the scrim, adhesive and vinyl layers to laminate the same because such is known in the art, as taught by the Admitted Prior Art (p. 3, line 5), where heat and pressure facilitates and expedites bonding between the layers.

Regarding claim 2, White teaches the scrim can be polyester (column 5, lines 4-7).

Regarding claim 6, selection of a particular plastisol adhesive would have been within purview of the skilled artisan; it being noted that Applicant’s claimed adhesive is well known and conventional.

Regarding claims 7-9, White teaches such vinyl layers (column 5, lines 13-14 and 25-26 and 49-51).

Regarding claim 16, selection of a particular device for heating the vinyl layers, scrim and adhesive and selection of a heating time and temperature would have been within purview of the skilled artisan depending on the materials used; it being noted that heating in an oven is well known and conventional and separately heating layers before bringing them together for lamination is also well known and conventional where this allows the heating temperature and time to be catered toward the individual layers so the most effective bonding conditions can be achieved for lamination.

Regarding claim 17, White teaches tinting the laminate (column 5, lines 11-14 and 24-26).

With respect to claim 18, it is noted this claim is a combination restating all the limitations set forth in claims 1, 6 and 16.

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12. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, the collective teachings of Price and Cheong and further in view of the Admitted Prior Art as applied to claim 1 above, and further in view of Eysel et al.

Regarding claims 3-5, White teaches the scrim “may” be polyester wherein the skilled artisan reading the reference as a whole would have appreciated the reference not being limited to such because the material of the scrim is not critical to the invention. Therefore, it would have been obvious to use other materials such as those claimed by Applicant because such materials are known in the art, as taught by Eysel (column 2, lines 21-23).

13. Claims 12-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, the collective teachings of Price and Cheong and further in view of the Admitted Prior Art as applied to claim 1 above, and further in view of Gray et al.

Regarding claims 12-13, selection of a particular denier for the scrim would have been within purview of the skilled artisan. However, it would have been obvious to use a scrim having a denier that falls within Applicant’s claimed ranges because such is known in the art, as taught by Gray (column 3, lines 12-19).

Regarding claims 14-15, selection of a particular number of strands per inch for the warp and fill of the scrim would have been within purview of the skilled artisan. However, it would have been obvious to use a number of strands per inch for the warp and fill of the scrim that falls within Applicant’s claimed ranges because such is known in the art, as taught by Gray (column 3, lines 22-23).

Regarding claim 19, it is noted this claim is a combination restating all the limitations set forth in claims 1, 6, 12-16 and 18.

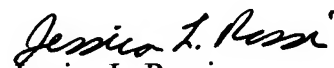
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom G. Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jessica L. Rossi
Primary Examiner
Art Unit 1733